

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: CHAPMAN POND	Lake Area (ha):	7.93
Town: SULLIVAN	Maximum depth (m):	5.2
County: Cheshire	Mean depth (m):	2.2
River Basin: Connecticut	Volume (m ³):	177500
Latitude: 43°02' N	Relative depth:	1.6
Longitude: 72°13' W	Shore configuration:	1.30
Elevation (ft): 1330	Areal water load (m/yr):	20.01
Shore length (m): 1300	Flushing rate (yr ⁻¹):	8.90
Watershed area (ha): 284.9	P retention coeff.:	0.48
% watershed ponded: 0.0	Lake type:	natural

BIOLOGICAL:

	28 January 1987	2 September 1986
DOM. PHYTOPLANKTON (% TOTAL) #1	ASTERIONELLA 38%	TINY PENNATE SPP. 40%
#2		CLOSTERIUM 10%
#3		FILAMENTOUS BL-GR SPP. 10%
PHYTOPLANKTON ABUNDANCE (cells/mL)		1140.0
CHLOROPHYLL-A (µg/L)		7.01
DOM. ZOOPLANKTON (% TOTAL) #1	SYNCHAETA 39%	NAUPLIUS LARVAE 33%
#2	KERATELLA 34%	POLYARTHRA 29%
#3	KELLICOTTIA 20%	CONOCHILOIDES 13%
ROTIFERS/LITER	72	96
MICROCRUSTACEA/LITER	2	74
ZOOPLANKTON ABUNDANCE (#/L)	76	172
VASCULAR PLANT ABUNDANCE		Abundant
SECCHI DISK TRANSPARENCY (m)		2.5
BOTTOM DISSOLVED OXYGEN (mg/L)	3.7	0.5
BACTERIA (fecal col., #/100 ml) #1		< 10
#2		
#3		

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None
Hypolimnion volume (m³): None

CHEMICAL:

Lake: CHAPMAN POND

Town: SULLIVAN

	28 January 1987		2 September 1986		
DEPTH (m)	1.0	3.0	1.0	3.0	4.5
pH (units)	5.2	5.2	5.1	5.1	5.7
A.N.C. (Alkalinity)	1.0	1.1	0.2	0.0	5.1
NITRATE & NITRITE NITROGEN	< 0.05	< 0.05	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.60	0.70	0.33	0.68	0.54
TOTAL PHOSPHORUS	0.008	0.014	0.018	0.011	0.030
CONDUCTIVITY (μ mhos/cm)	33.5	31.4	27.0	27.8	36.8
APPARENT COLOR (cpu)	39	38	40	45	115
MAGNESIUM			0.48		
CALCIUM			1.1		
SODIUM			1.9		
POTASSIUM			0.40		
CHLORIDE	3	3	3		4
SULFATE	6	6			
TN : TP	75	50	18		18
CALCITE SATURATION INDEX			6.9		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1986

D.O. S.D. PLANT CHL TOTAL CLASS

**	2	3	1	6	Meso.
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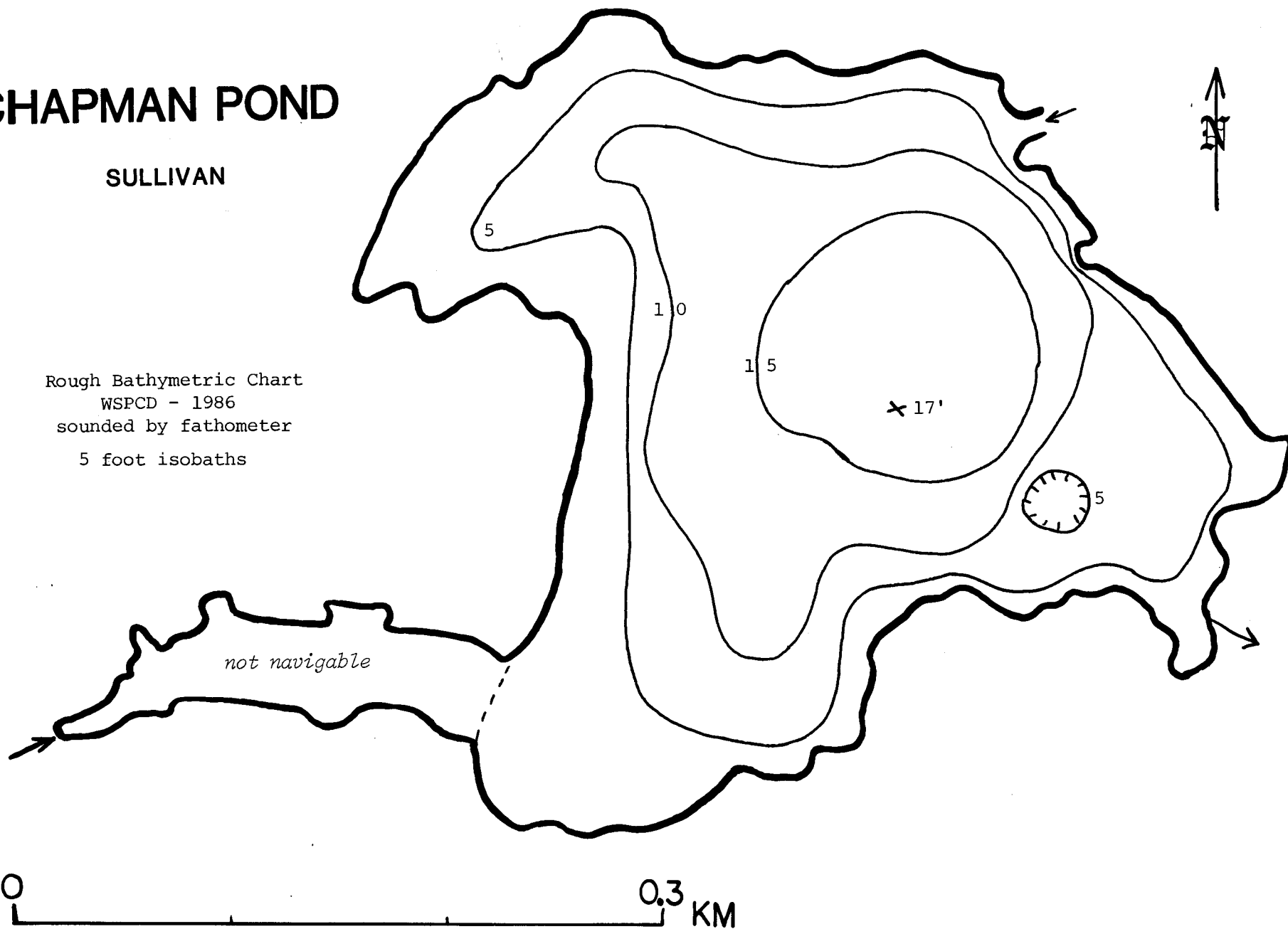
COMMENTS:

1. The whole-water phytoplankton was 40% dinoflagellates and 35% greens. Dominant genera were Peridinium (40%) and tiny green flagellates (35%).
2. Public boat launch was adequate. It was stony gravel, with a slight incline, into shallow, weedy water. Parking was available for several cars. Much trash was in the area.

CHAPMAN POND

SULLIVAN

Rough Bathymetric Chart
WSPCD - 1986
sounded by fathometer
5 foot isobaths



[illegible]

TOWN: SULLIVAN
WEATHER: MOSTLY OVERCAST

[illegible]

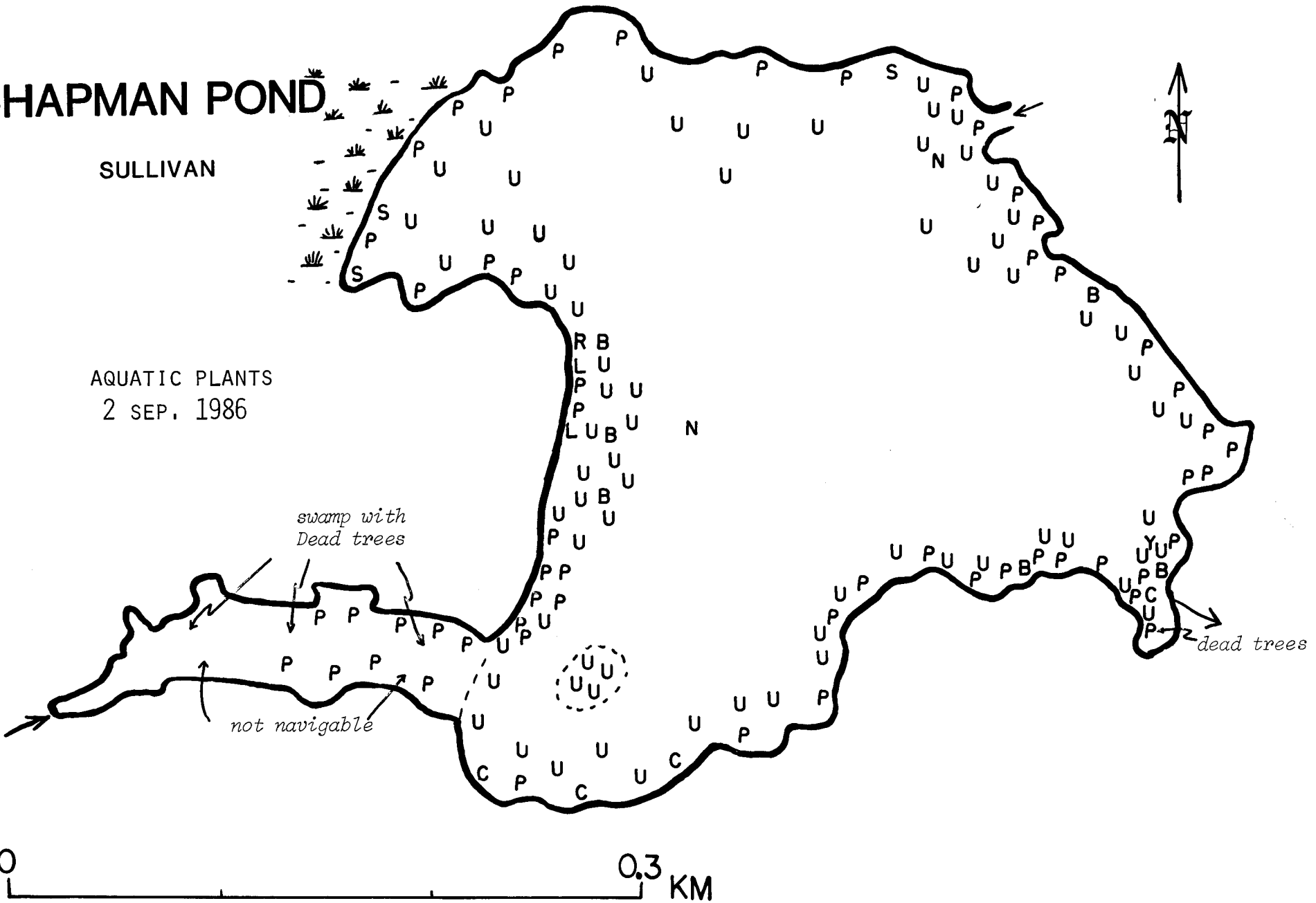
COMMENTS: A relatively constant decrease in temperature with depth was present - a typical thermal stratification was not present.

*Dissolved oxygen values are in mg/L

CHAPMAN POND

SULLIVAN

AQUATIC PLANTS
2 SEP. 1986



AQUATIC PLANT SURVEY

LAKE: CHAPMAN POND

TOWN: SULLIVAN

DATE: 09/02/86

[illegible]

OVERALL ABUNDANCE: Abundant

GENERAL OBSERVATIONS:

1. Many leeches were observed near the launch site; frogs and salamanders also observed.